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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,737	09/12/2003	Michael Z. Martin	8129.004.US	4924

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EXAMINER	
MCCORMICK, MELENIE LEE	
ART UNIT	**PAPER NUMBER**
1655	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/660,737	MARTIN, MICHAEL Z.	
	Examiner	Art Unit	
	Melenie McCormick	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *11-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's election with traverse of Group I (claims 1-10) in the reply filed on 01/19/07 is acknowledged. The traversal is on the ground(s) that because the groups are each classified under the same class (424), that it would not be a burden to search all the groups at once. This is not found persuasive because each of the groups I-III is classified under a different subclass within class 424. Each group would, therefore, require a separate search which would not necessarily be required of the other groups. As previously stated, it would be a burden to search al the groups at once. Applicants have also elected the species *Vaccinium macrocarpon* and carotenoids, anthocyanins and alkaloids with traverse. Applicant's traversal is on the grounds that the species do not overlap in scope. This is not found persuasive, however, because as previously stated, the species are distinct. Thus, it would be a burden to search all of the species encompassed by the claims at once.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite and confusing due to the phrase "wherein the respective weight ratios of substances within each selected class are within 100% of the same ratio for substances in the plant material". Although difficult to understand, the phrase has been interpreted to mean that the substances within the extract composition present in the composition within 100% of the ratio of the substances which are present in the plant. It is not clear, however, what is mean by "within 100%". Does this mean from 0% to 100% or does it mean that the substances in the composition are present in exactly (100%) the same ratio as the substances in the plant?

Claim 7 is rendered vague and indefinite due to the phrase "in relative ratios that mimic their ratios in the unextracted plant material". It is not clear what is meant by the term "mimic". It is not clear exactly how the ratios in the composition resemble the ratios in unextracted plant material.

All other claims depend directly or indirectly from rejected claims and are, therefore, also rejected under USC 112, second paragraph for the reasons set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as obvious over Walker et al. (US 5,474,774).

The claims are drawn to a soluble composition extracted from *Vaccinium macrocarpon* comprising multiple substances within at least 3 classes selected from the group consisting of carotenoids, anthocyanins, and alkaloids, wherein the respective weight ratio of substances within each selected class are within 100% of the same ratio for substances in the plant material and wherein the relative proportion of free sugar in the composition is less than 20% of the free sugar in the plant. The claims are further drawn to the composition wherein additional classes of substances are present, wherein less than 1% of the original water content of the plant material remains, and wherein the relative proportion of free sugar in the composition is less than 10% or less than 5% of the free sugar found in the plant material.

Walker et al. beneficially teach an extract made from *Vaccinium macrocarpon* (see e.g. col 1, lines 42-45 and 64-65). Walker et al. further teach that the extract is enriched to a similar degree in concentration of flavonoids and polyphenolic compounds as juices which are derived from the plant (see e.g. col 1, lines 57-59). The extract composition disclosed by Walker et al. would intrinsically contain the substances from the classes instantly claimed, as these substances are naturally occurring in cranberry plant material. Because Walker et al. teach that flavonoids and polyphenolic compounds are present in a similar degree as in the plant material, the composition taught by Walker et al. read on the instantly claimed extract composition containing multiples substances in ratios which mimic their weight ratio in the plant material. This is

especially true in light of the fact that Applicants have not established what these weight ratios are. Walker et al. further teach that the extract has a greatly reduced sugar content, which reads on less than 10% and less than 5% of the free sugar found in the plant material (see e.g. col 2, lines 49-32). Because the composition beneficially taught by Walker et al. is an extract and may be in powder form, it would necessarily have a lower water content than the original plant material (see e.g. col 3, lines 29-40). Walker et al. further disclose that the extract is soluble (see e.g. col 3, Table 1).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to prepare an extract composition with the properties instantly claimed. One of ordinary skill in the art would have been motivated and would have had a reasonable expectation of success in doing so based upon the beneficial teaching of Walker et al. that such an extract has been prepared. The adjustment of particular conventional working conditions (e.g. specific amounts of individual components within the extract composition) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

With respect to the USC 103 rejection above, please note that the Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether Applicants' *Vaccinium macrocarpon* extract composition differs and, if so, to what extent, from that of the discussed reference. Therefore, with the showing of the reference, the burden of establishing non-obviousness by objective evidence is shifted to the Applicants.

Conclusion

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melenie McCormick whose telephone number is (571) 272-8037. The examiner can normally be reached on M-F 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on (571) 272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CHRISTOPHER R. TATE
PRIMARY EXAMINER